Release notes for ENDF/B Development n-066_Dy_160 evaluation

April 26, 2017

- **checkr** Warnings:

    1. A previous error halted parsing of the current section
       MAT=6637, MF= 1, MT=451 (1): Parsing stopped

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 1, MT=451
        SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER      240 TO      456
    ```

- **checkr** Errors:

    1. A variable is outside the allowed ENDF range
       MAT=6637, MF= 1, MT=451 (0): Variable range

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 1, MT=451
        MOD =    1 OUT OF RANGE    0 -    0           RECORD NUMBER     240
    ```

    2. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 2, MT=151 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 2, MT=151
        SECTION  2/151 NOT IN DIRECTORY              RECORD NUMBER     458
    ```

    3. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 3, MT= 1 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 3, MT=  1
        SECTION  3/  1 NOT IN DIRECTORY              RECORD NUMBER     621
    ```

    4. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 3, MT= 2 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 3, MT=  2
        SECTION  3/  2 NOT IN DIRECTORY              RECORD NUMBER     637
    ```

    5. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 3, MT= 4 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 3, MT=  4
        SECTION  3/  4 NOT IN DIRECTORY              RECORD NUMBER     672
    ```

    6. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 3, MT= 16 (0): Directory (b)

    ```
    ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 16
        SECTION  3/ 16 NOT IN DIRECTORY              RECORD NUMBER     700
    ```

    7. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=6637, MF= 3, MT= 17 (0): Directory (b)

1

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 17
         SECTION  3/ 17 NOT IN DIRECTORY                RECORD NUMBER    709
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF= 3, MT= 22 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 22
         SECTION  3/ 22 NOT IN DIRECTORY                RECORD NUMBER    715
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF= 3, MT= 24 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 24
         SECTION  3/ 24 NOT IN DIRECTORY                RECORD NUMBER    725
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 28 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 28
         SECTION  3/ 28 NOT IN DIRECTORY                RECORD NUMBER    732
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 41 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 41
         SECTION  3/ 41 NOT IN DIRECTORY                RECORD NUMBER    741
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 51 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 51
         SECTION  3/ 51 NOT IN DIRECTORY                RECORD NUMBER    747
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 52 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 52
         SECTION  3/ 52 NOT IN DIRECTORY                RECORD NUMBER    766
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 53 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 53
         SECTION  3/ 53 NOT IN DIRECTORY                RECORD NUMBER    784
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 54 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 54
         SECTION  3/ 54 NOT IN DIRECTORY                  RECORD NUMBER    800
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 55 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 55
         SECTION  3/ 55 NOT IN DIRECTORY                  RECORD NUMBER    815
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 56 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 56
         SECTION  3/ 56 NOT IN DIRECTORY                  RECORD NUMBER    830
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 57 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 57
         SECTION  3/ 57 NOT IN DIRECTORY                  RECORD NUMBER    845
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 58 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 58
         SECTION  3/ 58 NOT IN DIRECTORY                  RECORD NUMBER    860
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 59 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 59
         SECTION  3/ 59 NOT IN DIRECTORY                  RECORD NUMBER    874
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 60 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 60
         SECTION  3/ 60 NOT IN DIRECTORY                  RECORD NUMBER    888
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 61 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 61
         SECTION  3/ 61 NOT IN DIRECTORY                  RECORD NUMBER    902
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 62
          SECTION  3/ 62 NOT IN DIRECTORY                    RECORD NUMBER      915
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 63 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 63
          SECTION  3/ 63 NOT IN DIRECTORY                    RECORD NUMBER      929
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 64 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 64
          SECTION  3/ 64 NOT IN DIRECTORY                    RECORD NUMBER      943
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 65 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 65
          SECTION  3/ 65 NOT IN DIRECTORY                    RECORD NUMBER      957
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 66 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 66
          SECTION  3/ 66 NOT IN DIRECTORY                    RECORD NUMBER      971
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 67 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 67
          SECTION  3/ 67 NOT IN DIRECTORY                    RECORD NUMBER      985
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 68 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 68
          SECTION  3/ 68 NOT IN DIRECTORY                    RECORD NUMBER      997
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 69 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 69
          SECTION  3/ 69 NOT IN DIRECTORY                    RECORD NUMBER     1011
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 70 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 70
              SECTION  3/ 70 NOT IN DIRECTORY                 RECORD NUMBER    1025
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 71 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 71
              SECTION  3/ 71 NOT IN DIRECTORY                 RECORD NUMBER    1039
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 72 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 72
              SECTION  3/ 72 NOT IN DIRECTORY                 RECORD NUMBER    1052
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 73 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 73
              SECTION  3/ 73 NOT IN DIRECTORY                 RECORD NUMBER    1065
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 74 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 74
              SECTION  3/ 74 NOT IN DIRECTORY                 RECORD NUMBER    1078
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT= 91 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT= 91
              SECTION  3/ 91 NOT IN DIRECTORY                 RECORD NUMBER    1091
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=102 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT=102
              SECTION  3/102 NOT IN DIRECTORY                 RECORD NUMBER    1108
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=103 (0): Directory (b)

```
         ERROR(S) FOUND IN MAT=6637, MF= 3, MT=103
              SECTION  3/103 NOT IN DIRECTORY                 RECORD NUMBER    1128
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=107 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=107
           SECTION  3/107 NOT IN DIRECTORY                    RECORD NUMBER    1144
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=600 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=600
           SECTION  3/600 NOT IN DIRECTORY                    RECORD NUMBER    1164
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=601 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=601
           SECTION  3/601 NOT IN DIRECTORY                    RECORD NUMBER    1176
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=602 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=602
           SECTION  3/602 NOT IN DIRECTORY                    RECORD NUMBER    1188
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=603 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=603
           SECTION  3/603 NOT IN DIRECTORY                    RECORD NUMBER    1200
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=604 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=604
           SECTION  3/604 NOT IN DIRECTORY                    RECORD NUMBER    1211
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=605 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=605
           SECTION  3/605 NOT IN DIRECTORY                    RECORD NUMBER    1222
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=606 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=606
           SECTION  3/606 NOT IN DIRECTORY                    RECORD NUMBER    1233
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=607 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=607
          SECTION  3/607 NOT IN DIRECTORY                    RECORD NUMBER    1244
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=608 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=608
          SECTION  3/608 NOT IN DIRECTORY                    RECORD NUMBER    1255
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=609 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=609
          SECTION  3/609 NOT IN DIRECTORY                    RECORD NUMBER    1266
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=610 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=610
          SECTION  3/610 NOT IN DIRECTORY                    RECORD NUMBER    1277
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=611 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=611
          SECTION  3/611 NOT IN DIRECTORY                    RECORD NUMBER    1288
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=649 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=649
          SECTION  3/649 NOT IN DIRECTORY                    RECORD NUMBER    1299
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=800 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=800
          SECTION  3/800 NOT IN DIRECTORY                    RECORD NUMBER    1310
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=801 (0): Directory (b)

```
       ERROR(S) FOUND IN MAT=6637, MF= 3, MT=801
          SECTION  3/801 NOT IN DIRECTORY                    RECORD NUMBER    1330
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=802 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=802
           SECTION  3/802 NOT IN DIRECTORY                    RECORD NUMBER    1349
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=803 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=803
           SECTION  3/803 NOT IN DIRECTORY                    RECORD NUMBER    1368
```

57. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=804 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=804
           SECTION  3/804 NOT IN DIRECTORY                    RECORD NUMBER    1386
```

58. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=805 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=805
           SECTION  3/805 NOT IN DIRECTORY                    RECORD NUMBER    1404
```

59. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=806 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=806
           SECTION  3/806 NOT IN DIRECTORY                    RECORD NUMBER    1422
```

60. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=807 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=807
           SECTION  3/807 NOT IN DIRECTORY                    RECORD NUMBER    1440
```

61. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=808 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=808
           SECTION  3/808 NOT IN DIRECTORY                    RECORD NUMBER    1458
```

62. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=809 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 3, MT=809
           SECTION  3/809 NOT IN DIRECTORY                    RECORD NUMBER    1476
```

63. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=810 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 3, MT=810
    SECTION  3/810 NOT IN DIRECTORY                RECORD NUMBER    1493
```

64. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=811 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 3, MT=811
    SECTION  3/811 NOT IN DIRECTORY                RECORD NUMBER    1511
```

65. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 3, MT=849 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 3, MT=849
    SECTION  3/849 NOT IN DIRECTORY                RECORD NUMBER    1529
```

66. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 4, MT=  2
    SECTION  4/  2 NOT IN DIRECTORY                RECORD NUMBER    1548
```

67. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 51 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 51
    SECTION  4/ 51 NOT IN DIRECTORY                RECORD NUMBER    1691
```

68. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 52 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 52
    SECTION  4/ 52 NOT IN DIRECTORY                RECORD NUMBER    1825
```

69. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 53 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 53
    SECTION  4/ 53 NOT IN DIRECTORY                RECORD NUMBER    1940
```

70. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 54
    SECTION  4/ 54 NOT IN DIRECTORY                RECORD NUMBER    2043
```

71. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 55
           SECTION  4/ 55 NOT IN DIRECTORY                   RECORD NUMBER    2146
```

72. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 56
           SECTION  4/ 56 NOT IN DIRECTORY                   RECORD NUMBER    2244
```

73. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 57
           SECTION  4/ 57 NOT IN DIRECTORY                   RECORD NUMBER    2313
```

74. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 58
           SECTION  4/ 58 NOT IN DIRECTORY                   RECORD NUMBER    2380
```

75. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 59
           SECTION  4/ 59 NOT IN DIRECTORY                   RECORD NUMBER    2445
```

76. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 60
           SECTION  4/ 60 NOT IN DIRECTORY                   RECORD NUMBER    2544
```

77. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 61
           SECTION  4/ 61 NOT IN DIRECTORY                   RECORD NUMBER    2643
```

78. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 62
           SECTION  4/ 62 NOT IN DIRECTORY                   RECORD NUMBER    2740
```

79. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT= 63 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 63
      SECTION  4/ 63 NOT IN DIRECTORY                 RECORD NUMBER    2812
```

80. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 64 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 64
      SECTION  4/ 64 NOT IN DIRECTORY                 RECORD NUMBER    2907
```

81. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 65 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 65
      SECTION  4/ 65 NOT IN DIRECTORY                 RECORD NUMBER    2970
```

82. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 66 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 66
      SECTION  4/ 66 NOT IN DIRECTORY                 RECORD NUMBER    3033
```

83. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 67 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 67
      SECTION  4/ 67 NOT IN DIRECTORY                 RECORD NUMBER    3094
```

84. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 68 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 68
      SECTION  4/ 68 NOT IN DIRECTORY                 RECORD NUMBER    3176
```

85. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 69 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 69
      SECTION  4/ 69 NOT IN DIRECTORY                 RECORD NUMBER    3253
```

86. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 70 (0): Directory (b)

```
    ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 70
      SECTION  4/ 70 NOT IN DIRECTORY                 RECORD NUMBER    3314
```

87. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 4, MT= 71 (0): Directory (b)

11

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 71
         SECTION  4/ 71 NOT IN DIRECTORY                  RECORD NUMBER    3375
```

88. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT= 72$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 72
         SECTION  4/ 72 NOT IN DIRECTORY                  RECORD NUMBER    3436
```

89. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT= 73$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 73
         SECTION  4/ 73 NOT IN DIRECTORY                  RECORD NUMBER    3495
```

90. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT= 74$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT= 74
         SECTION  4/ 74 NOT IN DIRECTORY                  RECORD NUMBER    3554
```

91. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT=600$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=600
         SECTION  4/600 NOT IN DIRECTORY                  RECORD NUMBER    3613
```

92. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT=601$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=601
         SECTION  4/601 NOT IN DIRECTORY                  RECORD NUMBER    3660
```

93. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT=602$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=602
         SECTION  4/602 NOT IN DIRECTORY                  RECORD NUMBER    3707
```

94. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT=603$ (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=603
         SECTION  4/603 NOT IN DIRECTORY                  RECORD NUMBER    3754
```

95. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=6637$, $MF= 4$, $MT=604$ (0): Directory (b)

12

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=604
         SECTION  4/604 NOT IN DIRECTORY                 RECORD NUMBER    3801
```

96. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=605 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=605
         SECTION  4/605 NOT IN DIRECTORY                 RECORD NUMBER    3848
```

97. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=606 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=606
         SECTION  4/606 NOT IN DIRECTORY                 RECORD NUMBER    3895
```

98. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=607 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=607
         SECTION  4/607 NOT IN DIRECTORY                 RECORD NUMBER    3942
```

99. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=608 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=608
         SECTION  4/608 NOT IN DIRECTORY                 RECORD NUMBER    3989
```

100. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=609 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=609
         SECTION  4/609 NOT IN DIRECTORY                 RECORD NUMBER    4036
```

101. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=610 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=610
         SECTION  4/610 NOT IN DIRECTORY                 RECORD NUMBER    4083
```

102. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=611 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=611
         SECTION  4/611 NOT IN DIRECTORY                 RECORD NUMBER    4130
```

103. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF= 4, MT=800 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=800
         SECTION  4/800 NOT IN DIRECTORY                RECORD NUMBER    4177
```

104. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=801 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=801
         SECTION  4/801 NOT IN DIRECTORY                RECORD NUMBER    4272
```

105. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=802 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=802
         SECTION  4/802 NOT IN DIRECTORY                RECORD NUMBER    4367
```

106. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=803 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=803
         SECTION  4/803 NOT IN DIRECTORY                RECORD NUMBER    4462
```

107. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=804 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=804
         SECTION  4/804 NOT IN DIRECTORY                RECORD NUMBER    4557
```

108. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=805 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=805
         SECTION  4/805 NOT IN DIRECTORY                RECORD NUMBER    4652
```

109. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=806 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=806
         SECTION  4/806 NOT IN DIRECTORY                RECORD NUMBER    4747
```

110. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=807 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF= 4, MT=807
         SECTION  4/807 NOT IN DIRECTORY                RECORD NUMBER    4842
```

111. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=808 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT=808
           SECTION  4/808 NOT IN DIRECTORY                    RECORD NUMBER    4937
```

112. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=809 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT=809
           SECTION  4/809 NOT IN DIRECTORY                    RECORD NUMBER    5032
```

113. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=810 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT=810
           SECTION  4/810 NOT IN DIRECTORY                    RECORD NUMBER    5127
```

114. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 4, MT=811 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 4, MT=811
           SECTION  4/811 NOT IN DIRECTORY                    RECORD NUMBER    5222
```

115. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 6, MT= 16 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 16
           SECTION  6/ 16 NOT IN DIRECTORY                    RECORD NUMBER    5318
```

116. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 6, MT= 17 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 17
           SECTION  6/ 17 NOT IN DIRECTORY                    RECORD NUMBER    6389
```

117. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 6, MT= 22 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 22
           SECTION  6/ 22 NOT IN DIRECTORY                    RECORD NUMBER    6555
```

118. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 6, MT= 24 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 24
           SECTION  6/ 24 NOT IN DIRECTORY                    RECORD NUMBER    8803
```

119. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF= 6, MT= 28 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 28
          SECTION  6/ 28 NOT IN DIRECTORY              RECORD NUMBER    9116
```

120. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 6, MT= 41 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 41
          SECTION  6/ 41 NOT IN DIRECTORY              RECORD NUMBER   10372
```

121. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 6, MT= 91 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT= 91
          SECTION  6/ 91 NOT IN DIRECTORY              RECORD NUMBER   10509
```

122. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 6, MT=102 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT=102
          SECTION  6/102 NOT IN DIRECTORY              RECORD NUMBER   16279
```

123. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 6, MT=649 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT=649
          SECTION  6/649 NOT IN DIRECTORY              RECORD NUMBER   17851
```

124. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF= 6, MT=849 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF= 6, MT=849
          SECTION  6/849 NOT IN DIRECTORY              RECORD NUMBER   19148
```

125. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=12, MT= 51 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 51
          SECTION 12/ 51 NOT IN DIRECTORY              RECORD NUMBER   20838
```

126. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=12, MT= 52 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 52
          SECTION 12/ 52 NOT IN DIRECTORY              RECORD NUMBER   20842
```

127. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=12, MT= 53 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 53
           SECTION 12/ 53 NOT IN DIRECTORY                 RECORD NUMBER   20846
```

128. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 54 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 54
           SECTION 12/ 54 NOT IN DIRECTORY                 RECORD NUMBER   20850
```

129. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 55
           SECTION 12/ 55 NOT IN DIRECTORY                 RECORD NUMBER   20854
```

130. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 56
           SECTION 12/ 56 NOT IN DIRECTORY                 RECORD NUMBER   20858
```

131. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 57
           SECTION 12/ 57 NOT IN DIRECTORY                 RECORD NUMBER   20862
```

132. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 58
           SECTION 12/ 58 NOT IN DIRECTORY                 RECORD NUMBER   20866
```

133. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 59
           SECTION 12/ 59 NOT IN DIRECTORY                 RECORD NUMBER   20870
```

134. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 60
           SECTION 12/ 60 NOT IN DIRECTORY                 RECORD NUMBER   20874
```

135. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 61 (0): Directory (b)

17

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 61
         SECTION 12/ 61 NOT IN DIRECTORY                 RECORD NUMBER   20878
```

136. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 62 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 62
         SECTION 12/ 62 NOT IN DIRECTORY                 RECORD NUMBER   20882
```

137. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 63 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 63
         SECTION 12/ 63 NOT IN DIRECTORY                 RECORD NUMBER   20886
```

138. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 64 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 64
         SECTION 12/ 64 NOT IN DIRECTORY                 RECORD NUMBER   20890
```

139. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 65 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 65
         SECTION 12/ 65 NOT IN DIRECTORY                 RECORD NUMBER   20895
```

140. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 66 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 66
         SECTION 12/ 66 NOT IN DIRECTORY                 RECORD NUMBER   20900
```

141. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 67 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 67
         SECTION 12/ 67 NOT IN DIRECTORY                 RECORD NUMBER   20905
```

142. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 68 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT= 68
         SECTION 12/ 68 NOT IN DIRECTORY                 RECORD NUMBER   20909
```

143. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT= 69 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 69
          SECTION 12/ 69 NOT IN DIRECTORY                    RECORD NUMBER    20913
```

144. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT= 70 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 70
          SECTION 12/ 70 NOT IN DIRECTORY                    RECORD NUMBER    20917
```

145. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT= 71 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 71
          SECTION 12/ 71 NOT IN DIRECTORY                    RECORD NUMBER    20921
```

146. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT= 72 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 72
          SECTION 12/ 72 NOT IN DIRECTORY                    RECORD NUMBER    20925
```

147. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT= 73 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 73
          SECTION 12/ 73 NOT IN DIRECTORY                    RECORD NUMBER    20930
```

148. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT= 74 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT= 74
          SECTION 12/ 74 NOT IN DIRECTORY                    RECORD NUMBER    20934
```

149. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT=601 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=601
          SECTION 12/601 NOT IN DIRECTORY                    RECORD NUMBER    20939
```

150. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT=602 \ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=602
          SECTION 12/602 NOT IN DIRECTORY                    RECORD NUMBER    20943
```

151. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=6637, MF=12, MT=603 \ (0)$: Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=603
    SECTION 12/603 NOT IN DIRECTORY                RECORD NUMBER   20947
```

152. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=604 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=604
    SECTION 12/604 NOT IN DIRECTORY                RECORD NUMBER   20951
```

153. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=605 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=605
    SECTION 12/605 NOT IN DIRECTORY                RECORD NUMBER   20955
```

154. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=606 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=606
    SECTION 12/606 NOT IN DIRECTORY                RECORD NUMBER   20959
```

155. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=607 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=607
    SECTION 12/607 NOT IN DIRECTORY                RECORD NUMBER   20963
```

156. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=608 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=608
    SECTION 12/608 NOT IN DIRECTORY                RECORD NUMBER   20967
```

157. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=609 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=609
    SECTION 12/609 NOT IN DIRECTORY                RECORD NUMBER   20971
```

158. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=610 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=6637, MF=12, MT=610
    SECTION 12/610 NOT IN DIRECTORY                RECORD NUMBER   20975
```

159. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=611 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=611
          SECTION 12/611 NOT IN DIRECTORY                 RECORD NUMBER    20979
```

160. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=801 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=801
          SECTION 12/801 NOT IN DIRECTORY                 RECORD NUMBER    20983
```

161. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=802 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=802
          SECTION 12/802 NOT IN DIRECTORY                 RECORD NUMBER    20987
```

162. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=803 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=803
          SECTION 12/803 NOT IN DIRECTORY                 RECORD NUMBER    20991
```

163. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=804 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=804
          SECTION 12/804 NOT IN DIRECTORY                 RECORD NUMBER    20995
```

164. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=805 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=805
          SECTION 12/805 NOT IN DIRECTORY                 RECORD NUMBER    20999
```

165. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=806 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=806
          SECTION 12/806 NOT IN DIRECTORY                 RECORD NUMBER    21003
```

166. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=807 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=12, MT=807
          SECTION 12/807 NOT IN DIRECTORY                 RECORD NUMBER    21007
```

167. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=12, MT=808 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT=808
         SECTION 12/808 NOT IN DIRECTORY                    RECORD NUMBER    21011
```

168. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=809 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT=809
         SECTION 12/809 NOT IN DIRECTORY                    RECORD NUMBER    21015
```

169. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=810 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT=810
         SECTION 12/810 NOT IN DIRECTORY                    RECORD NUMBER    21019
```

170. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=12, MT=811 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=12, MT=811
         SECTION 12/811 NOT IN DIRECTORY                    RECORD NUMBER    21023
```

171. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=14, MT= 51 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 51
         SECTION 14/ 51 NOT IN DIRECTORY                    RECORD NUMBER    21028
```

172. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=14, MT= 52 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 52
         SECTION 14/ 52 NOT IN DIRECTORY                    RECORD NUMBER    21030
```

173. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=14, MT= 53 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 53
         SECTION 14/ 53 NOT IN DIRECTORY                    RECORD NUMBER    21032
```

174. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=14, MT= 54 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 54
         SECTION 14/ 54 NOT IN DIRECTORY                    RECORD NUMBER    21034
```

175. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=6637, MF=14, MT= 55 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 55
            SECTION 14/ 55 NOT IN DIRECTORY                 RECORD NUMBER   21036
```

176. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 56 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 56
            SECTION 14/ 56 NOT IN DIRECTORY                 RECORD NUMBER   21038
```

177. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 57
            SECTION 14/ 57 NOT IN DIRECTORY                 RECORD NUMBER   21040
```

178. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 58
            SECTION 14/ 58 NOT IN DIRECTORY                 RECORD NUMBER   21042
```

179. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 59
            SECTION 14/ 59 NOT IN DIRECTORY                 RECORD NUMBER   21044
```

180. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 60
            SECTION 14/ 60 NOT IN DIRECTORY                 RECORD NUMBER   21046
```

181. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 61
            SECTION 14/ 61 NOT IN DIRECTORY                 RECORD NUMBER   21048
```

182. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 62
            SECTION 14/ 62 NOT IN DIRECTORY                 RECORD NUMBER   21050
```

183. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 63 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 63
         SECTION 14/ 63 NOT IN DIRECTORY                   RECORD NUMBER   21052
```

184. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 64 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 64
         SECTION 14/ 64 NOT IN DIRECTORY                   RECORD NUMBER   21054
```

185. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 65 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 65
         SECTION 14/ 65 NOT IN DIRECTORY                   RECORD NUMBER   21056
```

186. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 66 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 66
         SECTION 14/ 66 NOT IN DIRECTORY                   RECORD NUMBER   21058
```

187. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 67 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 67
         SECTION 14/ 67 NOT IN DIRECTORY                   RECORD NUMBER   21060
```

188. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 68 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 68
         SECTION 14/ 68 NOT IN DIRECTORY                   RECORD NUMBER   21062
```

189. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 69 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 69
         SECTION 14/ 69 NOT IN DIRECTORY                   RECORD NUMBER   21064
```

190. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 70 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT= 70
         SECTION 14/ 70 NOT IN DIRECTORY                   RECORD NUMBER   21066
```

191. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT= 71 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 71
          SECTION 14/ 71 NOT IN DIRECTORY                RECORD NUMBER   21068
```

192. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT= 72 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 72
          SECTION 14/ 72 NOT IN DIRECTORY                RECORD NUMBER   21070
```

193. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT= 73 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 73
          SECTION 14/ 73 NOT IN DIRECTORY                RECORD NUMBER   21072
```

194. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT= 74 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT= 74
          SECTION 14/ 74 NOT IN DIRECTORY                RECORD NUMBER   21074
```

195. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=601 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=601
          SECTION 14/601 NOT IN DIRECTORY                RECORD NUMBER   21076
```

196. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=602 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=602
          SECTION 14/602 NOT IN DIRECTORY                RECORD NUMBER   21078
```

197. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=603 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=603
          SECTION 14/603 NOT IN DIRECTORY                RECORD NUMBER   21080
```

198. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=604 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=604
          SECTION 14/604 NOT IN DIRECTORY                RECORD NUMBER   21082
```

199. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=605 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=605
            SECTION 14/605 NOT IN DIRECTORY                 RECORD NUMBER    21084
```

200. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=606 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=606
            SECTION 14/606 NOT IN DIRECTORY                 RECORD NUMBER    21086
```

201. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=607 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=607
            SECTION 14/607 NOT IN DIRECTORY                 RECORD NUMBER    21088
```

202. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=608 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=608
            SECTION 14/608 NOT IN DIRECTORY                 RECORD NUMBER    21090
```

203. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=609 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=609
            SECTION 14/609 NOT IN DIRECTORY                 RECORD NUMBER    21092
```

204. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=610 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=610
            SECTION 14/610 NOT IN DIRECTORY                 RECORD NUMBER    21094
```

205. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=611 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=611
            SECTION 14/611 NOT IN DIRECTORY                 RECORD NUMBER    21096
```

206. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=801 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=6637, MF=14, MT=801
            SECTION 14/801 NOT IN DIRECTORY                 RECORD NUMBER    21098
```

207. Missing a section in directory so your directory is messed up. This error will break everything else
   MAT=6637, MF=14, MT=802 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=802
        SECTION 14/802 NOT IN DIRECTORY                    RECORD NUMBER    21100
```

208. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=803 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=803
        SECTION 14/803 NOT IN DIRECTORY                    RECORD NUMBER    21102
```

209. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=804 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=804
        SECTION 14/804 NOT IN DIRECTORY                    RECORD NUMBER    21104
```

210. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=805 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=805
        SECTION 14/805 NOT IN DIRECTORY                    RECORD NUMBER    21106
```

211. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=806 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=806
        SECTION 14/806 NOT IN DIRECTORY                    RECORD NUMBER    21108
```

212. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=807 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=807
        SECTION 14/807 NOT IN DIRECTORY                    RECORD NUMBER    21110
```

213. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=808 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=808
        SECTION 14/808 NOT IN DIRECTORY                    RECORD NUMBER    21112
```

214. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=809 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=6637, MF=14, MT=809
        SECTION 14/809 NOT IN DIRECTORY                    RECORD NUMBER    21114
```

215. Missing a section in directory so your directory is messed up. This error will break everything else
     MAT=6637, MF=14, MT=810 (0): Directory (b)

27

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT=810
            SECTION 14/810 NOT IN DIRECTORY                    RECORD NUMBER   21116
```

216. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=6637, MF=14, MT=811 (0): Directory (b)

```
      ERROR(S) FOUND IN MAT=6637, MF=14, MT=811
            SECTION 14/811 NOT IN DIRECTORY                    RECORD NUMBER   21118
```

- psyche Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00800E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
   FILE  2
      SECTION 151
            ENERGY =  2.00800E+03. STRENGTH FUNCTION IS  1.65000E-04
                          STRENGTH FUNCTION 1.65000E-04
                                        LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
   ... [15 more lines]
```

2. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00800E+03. STRENGTH FUNCTION IS 1.65000E-04 / ENERGY = 2.00800E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.54784E+01 SHOULD BE 1.36945E+01 (0): URR dens. (a)

```
   FILE  2
      SECTION 151
            ENERGY =  2.00800E+03. STRENGTH FUNCTION IS  1.65000E-04
                   ENERGY =  2.00800E+03. STRENGTH FUNCTION IS  1.65000E-04
                             DENSITY  1.54784E+01 SHOULD BE  1.36945E+01
```

3. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.54659E+01 SHOULD BE 1.36834E+01 (0): URR dens. (a)

```
   FILE  2
      SECTION 151
               ENERGY =  2.50000E+03. STRENGTH FUNCTION IS  1.65000E-04
                             DENSITY  1.54659E+01 SHOULD BE  1.36834E+01
```

4. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
   FILE  2
      SECTION 151
               ENERGY =  2.50000E+03. STRENGTH FUNCTION IS  1.65000E-04
                          STRENGTH FUNCTION 1.65000E-04
                                        LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

5. Level density in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 3.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.54531E+01 SHOULD BE 1.36721E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  3.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                      DENSITY  1.54531E+01 SHOULD BE  1.36721E+01
```

6. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 3.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
         ENERGY =  3.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                      STRENGTH FUNCTION 1.65000E-04
                                    LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

7. Level density in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 4.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.54276E+01 SHOULD BE 1.36496E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  4.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                      DENSITY  1.54276E+01 SHOULD BE  1.36496E+01
```

8. Strength function in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 4.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
         ENERGY =  4.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                      STRENGTH FUNCTION 1.65000E-04
                                    LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

9. Level density in URR not in agreement with PSYCHE's expectations
   FILE 2 / SECTION 151 / ENERGY = 6.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.53768E+01 SHOULD BE 1.36046E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  6.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                      DENSITY  1.53768E+01 SHOULD BE  1.36046E+01
```

10. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 6.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  6.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                        STRENGTH FUNCTION 1.65000E-04
                                     LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

11. Level density in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 8.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.53262E+01 SHOULD BE 1.35598E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  8.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                        DENSITY  1.53262E+01 SHOULD BE  1.35598E+01
```

12. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 8.00000E+03. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  8.00000E+03. STRENGTH FUNCTION IS  1.65000E-04
                        STRENGTH FUNCTION 1.65000E-04
                                     LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

13. Level density in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 1.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.52757E+01 SHOULD BE 1.35152E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  1.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                        DENSITY  1.52757E+01 SHOULD BE  1.35152E+01
```

14. Strength function in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 1.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  1.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                        STRENGTH FUNCTION 1.65000E-04
                                     LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

15. Level density in URR not in agreement with PSYCHE's expectations
    FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.50260E+01 SHOULD BE 1.32942E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  2.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                        DENSITY  1.50260E+01 SHOULD BE  1.32942E+01
```

16. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
    SECTION 151
            ENERGY =  2.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                            STRENGTH FUNCTION 1.65000E-04
                                              LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

17. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.47805E+01 SHOULD BE 1.30771E+01 (0): URR dens. (a)

```
FILE  2
    SECTION 151
            ENERGY =  3.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                            DENSITY  1.47805E+01 SHOULD BE  1.30771E+01
```

18. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
    SECTION 151
            ENERGY =  3.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                            STRENGTH FUNCTION 1.65000E-04
                                              LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

19. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.45392E+01 SHOULD BE 1.28636E+01 (0): URR dens. (a)

```
FILE  2
    SECTION 151
            ENERGY =  4.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                            DENSITY  1.45392E+01 SHOULD BE  1.28636E+01
```

20. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
    SECTION 151
            ENERGY =  4.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                            STRENGTH FUNCTION 1.65000E-04
                                              LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

21. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.43021E+01 SHOULD BE 1.26538E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  5.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         DENSITY  1.43021E+01 SHOULD BE  1.26538E+01
```

22. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  5.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         STRENGTH FUNCTION 1.65000E-04
                                    LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

23. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.40690E+01 SHOULD BE 1.24475E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  6.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         DENSITY  1.40690E+01 SHOULD BE  1.24475E+01
```

24. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  6.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         STRENGTH FUNCTION 1.65000E-04
                                    LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

25. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.38399E+01 SHOULD BE 1.22448E+01 (0): URR dens. (a)

```
FILE   2
   SECTION 151
          ENERGY =  7.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         DENSITY  1.38399E+01 SHOULD BE  1.22448E+01
```

26. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE   2
   SECTION 151
          ENERGY =  7.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                         STRENGTH FUNCTION 1.65000E-04
                                    LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

27. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.36146E+01 SHOULD BE 1.20456E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
           ENERGY =  8.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                           DENSITY  1.36146E+01 SHOULD BE  1.20456E+01
```

28. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
           ENERGY =  8.00000E+04. STRENGTH FUNCTION IS  1.65000E-04
                           STRENGTH FUNCTION 1.65000E-04
                                       LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

29. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.73360E+04. STRENGTH FUNCTION IS 1.65000E-04 / DENSITY 1.34518E+01 SHOULD BE 1.19015E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
           ENERGY =  8.73360E+04. STRENGTH FUNCTION IS  1.65000E-04
                           DENSITY  1.34518E+01 SHOULD BE  1.19015E+01
```

30. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.73360E+04. STRENGTH FUNCTION IS 1.65000E-04 / STRENGTH FUNCTION 1.65000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE  2
   SECTION 151
           ENERGY =  8.73360E+04. STRENGTH FUNCTION IS  1.65000E-04
                           STRENGTH FUNCTION 1.65000E-04
                                       LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

31. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00800E+03. STRENGTH FUNCTION IS 1.89000E-04 / ENERGY = 2.00800E+03. STRENGTH FUNCTION IS 1.89000E-04 / DENSITY 1.26551E+01 SHOULD BE 1.03189E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  2.00800E+03. STRENGTH FUNCTION IS  1.89000E-04
                   ENERGY =  2.00800E+03. STRENGTH FUNCTION IS  1.89000E-04
                                 DENSITY  1.26551E+01 SHOULD BE  1.03189E+01
```

32. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 1.89000E-04 / DENSITY 1.26449E+01 SHOULD BE 1.03106E+01 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  2.50000E+03. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.26449E+01 SHOULD BE  1.03106E+01
```

33. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 3.00000E+03. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.26344E+01 SHOULD BE 1.03021E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
         ENERGY =  3.00000E+03. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.26344E+01 SHOULD BE  1.03021E+01
```

34. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 4.00000E+03. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.26136E+01 SHOULD BE 1.02851E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
         ENERGY =  4.00000E+03. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.26136E+01 SHOULD BE  1.02851E+01
```

35. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 6.00000E+03. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.25721E+01 SHOULD BE 1.02512E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
         ENERGY =  6.00000E+03. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.25721E+01 SHOULD BE  1.02512E+01
```

36. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 8.00000E+03. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.25307E+01 SHOULD BE 1.02175E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
         ENERGY =  8.00000E+03. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.25307E+01 SHOULD BE  1.02175E+01
```

37. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 1.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.24894E+01 SHOULD BE 1.01838E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
         ENERGY =  1.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                     DENSITY  1.24894E+01 SHOULD BE  1.01838E+01
```

38. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.22852E+01 SHOULD BE 1.00173E+01 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  2.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.22852E+01 SHOULD BE  1.00173E+01
```

39. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.20845E+01 SHOULD BE 9.85367E+00 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  3.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.20845E+01 SHOULD BE  9.85367E+00
```

40. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.18873E+01 SHOULD BE 9.69282E+00 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  4.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.18873E+01 SHOULD BE  9.69282E+00
```

41. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.16934E+01 SHOULD BE 9.53472E+00 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  5.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.16934E+01 SHOULD BE  9.53472E+00
```

42. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.15028E+01 SHOULD BE 9.37932E+00 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  6.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.15028E+01 SHOULD BE  9.37932E+00
```

43. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.13154E+01 SHOULD BE 9.22657E+00 (0): URR dens. (a)*

```
FILE  2
   SECTION 151
          ENERGY =  7.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                         DENSITY  1.13154E+01 SHOULD BE  9.22657E+00
```

44. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.11313E+01 SHOULD BE 9.07642E+00 (0): URR dens. (a)*

```
       FILE  2
          SECTION 151
                  ENERGY =  8.00000E+04. STRENGTH FUNCTION IS  1.89000E-04
                                  DENSITY  1.11313E+01 SHOULD BE  9.07642E+00
```

45. Level density in URR not in agreement with PSYCHE's expectations
    *FILE 2 / SECTION 151 / ENERGY = 8.73360E+04. STRENGTH FUNCTION IS
    1.89000E-04 / DENSITY 1.09982E+01 SHOULD BE 8.96790E+00 (0): URR dens. (a)*

```
       FILE  2
          SECTION 151
                  ENERGY =  8.73360E+04. STRENGTH FUNCTION IS  1.89000E-04
                                  DENSITY  1.09982E+01 SHOULD BE  8.96790E+00
```

46. Non-threshold reaction with Q value differing from PSYCHE's expectations
    *FILE 3 / SECTION 22 / THE CALCULATED Q 5.83123E+05 DISSAGREES WITH
    THE GIVEN Q 4.38000E+05 (0): Iffy Q*

```
       FILE  3
          SECTION  22
                  THE CALCULATED Q  5.83123E+05 DISSAGREES WITH THE GIVEN Q  4.38000E+05
```

47. Non-threshold reaction with Q value differing from PSYCHE's expectations
    *FILE 3 / SECTION 107 / THE CALCULATED Q 6.89903E+06 DISSAGREES WITH
    THE GIVEN Q 0.00000E+00 (0): Iffy Q*

```
       FILE  3
          SECTION 107
                  THE CALCULATED Q  6.89903E+06 DISSAGREES WITH THE GIVEN Q  0.00000E+00
```

- `linear` Errors:

    1. Negative cross section found
       0: Neg. Sig(E)

```
       Linearize ENDF/B Cross Sections (LINEAR 2015-1)
       ----------------------------------------------------------------------------
       Retrieval Criteria----------        MAT
       Monitor Mode----------------        Off
       Minimum Cross Section-------- 1.0000E-10 (Default Option)
    ... [104 more lines]
```

- `recent` Warnings:

    1. generic warning message
       0: Warning

```
       Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
       ============================================================================
       Retrieval Criteria----------        MAT
       File 2 Mimimum Cross Section- 1.0000E-10 (Standard Option)
       Reactions with No Background-     Output (Resonance Contribution)
    ... [354 more lines]
```

- `groupie` Errors:

1. Very small elastic cross section found
   0: Small elastic

   ```
   Multi-Group and Multi-Band Parameters from ENDF/B Data (GROUPIE 2015-2)
   ------------------------------------------------------------------------
   ENDF/B Input and Output Data Filenames
   ENDFB.IN
   ENDFB.OUT
   ... [97 more lines]
   ```

- `fudge-4.0` Warnings:

  1. Missing a channel with a particular angular momenta combination
     resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

     ```
     WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
     ```

  2. Potential scattering hasn't converted, you need more L's!
     resonances / resolved (Error # 1): potentialScatteringNotConverged

     ```
     WARNING: Potential scattering hasn't converged by L=0 at E=2008.0 eV, xs[0]/xs[0]=100.0% > 0.1%
     ```

  3. Cross section does not match sum of linked reaction cross sections
     crossSectionSum label 0: total (Error # 0): CS Sum.

     ```
     WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.91%
     ```

- `fudge-4.0` Errors:

  1. Calculated and tabulated Q values disagree.
     reaction label 26: n[multiplicity:'2'] + Dy159 + gamma (Error # 0): Q mismatch

     ```
     WARNING: Calculated and tabulated Q-values disagree: -8456088.279785156 eV vs -8.576e6 eV!
     ```

  2. Calculated and tabulated Q values disagree.
     reaction label 27: n[multiplicity:'3'] + Dy158 + gamma (Error # 0): Q mismatch

     ```
     WARNING: Calculated and tabulated Q-values disagree: -15972611.19509888 eV vs -1.5407e7 eV!
     ```

  3. Calculated and tabulated Q values disagree.
     reaction label 28: n + H1 + Tb159 + gamma (Error # 0): Q mismatch

     ```
     WARNING: Calculated and tabulated Q-values disagree: -7673291.981842041 eV vs -7.429e6 eV!
     ```

  4. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.
     reaction label 28: n + H1 + Tb159 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

     ```
     WARNING: Extra zero-probability outgoing energies found at incident energy 1.e7 eV
     WARNING: Extra zero-probability outgoing energies found at incident energy 1.1e7 eV
     WARNING: Extra zero-probability outgoing energies found at incident energy 1.2e7 eV
     WARNING: Extra zero-probability outgoing energies found at incident energy 1.3e7 eV
             ... plus 8 more instances of this message
     ```

37

5. Calculated and tabulated Q values disagree.
reaction label 29: H1 + Tb160 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1096334.430908203 eV vs -1.054e6 eV!
   ```

6. Calculated and tabulated Q values disagree.
reaction label 30: H1 + Tb160_e1 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1160024.430908203 eV vs -1117690. eV!
   ```

7. Calculated and tabulated Q values disagree.
reaction label 31: H1 + Tb160_e2 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1160444.430908203 eV vs -1118110. eV!
   ```

8. Calculated and tabulated Q values disagree.
reaction label 32: H1 + Tb160_e3 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1175204.430908203 eV vs -1132870. eV!
   ```

9. Calculated and tabulated Q values disagree.
reaction label 33: H1 + Tb160_e4 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -1175424.430908203 eV vs -1133090. eV!
   ```

10. Calculated and tabulated Q values disagree.
reaction label 34: H1 + Tb160_e5 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1201914.430908203 eV vs -1159580. eV!
    ```

11. Calculated and tabulated Q values disagree.
reaction label 35: H1 + Tb160_e6 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1222814.430908203 eV vs -1180480. eV!
    ```

12. Calculated and tabulated Q values disagree.
reaction label 36: H1 + Tb160_e7 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1229554.430908203 eV vs -1187220. eV!
    ```

13. Calculated and tabulated Q values disagree.
reaction label 37: H1 + Tb160_e8 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1235064.430908203 eV vs -1192730. eV!
    ```

14. Calculated and tabulated Q values disagree.
reaction label 38: H1 + Tb160_e9 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1235804.430908203 eV vs -1193470. eV!
    ```

15. Calculated and tabulated Q values disagree.
reaction label 39: H1 + Tb160_e10 (Error # 0): Q mismatch

    ```
    WARNING: Calculated and tabulated Q-values disagree: -1252774.430908203 eV vs -1210440. eV!
    ```

16. Calculated and tabulated Q values disagree.
    reaction label 40: H1 + Tb160_e11 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -1264084.430908203 eV vs -1221750. eV!`

17. Calculated and tabulated Q values disagree.
    reaction label 41: H1 + (Tb160_c ->Tb160 + gamma) (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: -1264084.430908203 eV vs -1221750. eV!`

18. Calculated and tabulated Q values disagree.
    reaction label 42: He4 + Gd157 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6372456.441223145 eV vs 6.798e6 eV!`

19. Calculated and tabulated Q values disagree.
    reaction label 43: He4 + Gd157_e1 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6317926.441223145 eV vs 6743470. eV!`

20. Calculated and tabulated Q values disagree.
    reaction label 44: He4 + Gd157_e2 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6308536.441223145 eV vs 6734080. eV!`

21. Calculated and tabulated Q values disagree.
    reaction label 45: He4 + Gd157_e3 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6256736.441223145 eV vs 6682280. eV!`

22. Calculated and tabulated Q values disagree.
    reaction label 46: He4 + Gd157_e4 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6241006.441223145 eV vs 6666550. eV!`

23. Calculated and tabulated Q values disagree.
    reaction label 47: He4 + Gd157_e5 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6192226.441223145 eV vs 6617770. eV!`

24. Calculated and tabulated Q values disagree.
    reaction label 48: He4 + Gd157_e6 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6145146.441223145 eV vs 6570690. eV!`

25. Calculated and tabulated Q values disagree.
    reaction label 49: He4 + Gd157_e7 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6096456.441223145 eV vs 6.522e6 eV!`

26. Calculated and tabulated Q values disagree.
    reaction label 50: He4 + Gd157_e8 (Error # 0): Q mismatch

    `WARNING: Calculated and tabulated Q-values disagree: 6057456.441223145 eV vs 6.483e6 eV!`

27. Calculated and tabulated Q values disagree.
reaction label 51: He4 + Gd157_e9 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6025206.441223145 eV vs 6450750. eV!
```

28. Calculated and tabulated Q values disagree.
reaction label 52: He4 + Gd157_e10 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6012456.441223145 eV vs 6.438e6 eV!
```

29. Calculated and tabulated Q values disagree.
reaction label 53: He4 + Gd157_e11 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6000456.441223145 eV vs 6.426e6 eV!
```

30. Calculated and tabulated Q values disagree.
reaction label 54: He4 + (Gd157_c ->Gd157 + gamma) (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6000456.441223145 eV vs 6.426e6 eV!
```

31. Calculated and tabulated Q values disagree.
reaction label 55: Dy161 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 6113029.570007324 eV vs 6.454e6 eV!
```

32. Calculated and tabulated Q values disagree.
reaction label 56: n + He4 + Gd156 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -204501.1097106934 eV vs 4.38e5 eV!
```

33. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.
reaction label 56: n + He4 + Gd156 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 7.e6 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 8.e6 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 9.e6 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 1.e7 eV
        ... plus 11 more instances of this message
```

34. Calculated and tabulated Q values disagree.
reaction label 57: n[multiplicity:'2'] + He4 + Gd155 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -8660589.389465332 eV vs -8.098e6 eV!
```

35. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.
reaction label 57: n[multiplicity:'2'] + He4 + Gd155 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 1.6e7 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 1.7e7 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 1.8e7 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 1.9e7 eV
        ... plus 1 more instances of this message
```

36. Calculated and tabulated Q values disagree.
    reaction label 58: n[multiplicity:'2'] + H1 + Tb158 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -16129380.26156616 eV vs -1.5562e7 eV!
```

37. If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.
    reaction label 58: n[multiplicity:'2'] + H1 + Tb158 + gamma / Product: n / Distribution: / energyAngular - XYs3d: (Error # 0): extraOutgoingEnergy

```
WARNING: Extra zero-probability outgoing energies found at incident energy 1.8e7 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 1.9e7 eV
WARNING: Extra zero-probability outgoing energies found at incident energy 2.e7 eV
```

38. Cross section domain does not match domain of linked reaction cross section sum
    crossSectionSum label 1: (z,n) (Error # 0): summedCrossSectionDomainMismatch

```
WARNING: Cross section domain does not match domain of linked reaction cross section sum
```

39. Cross section domain does not match domain of linked reaction cross section sum
    crossSectionSum label 2: (z,p) (Error # 0): summedCrossSectionDomainMismatch

```
WARNING: Cross section domain does not match domain of linked reaction cross section sum
```

- `njoy2012` Warnings:

  1. Recoil is not given, so one-particle recoil approximation used.
     heatr...prompt kerma (0): HEATR/hinit (4)

```
---message from hinit---mf6, mt102 does not give recoil za= 66161
                       photon momentum recoil used.
```

- `njoy2012` Errors:

  1. The elastic cross section is negative
     reconr...reconstruct pointwise cross sections in pendf format (0): Sig_el(E)<0

```
---message from emerge---nonpositive elastic cross sections found.
```